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(54) Title: COMPOSITIONS AND METHODS FOR USE IN MEDICAL DIAGNOSIS

(57) Abstract: The present invention relates to compositions and methods for use in medical diagnosis and patient's monitoring. It more particularly relates to a biocompatible gel comprising nanoparticles and/or nanoparticles aggregates, wherein i) the nanoparticle and/or nanoparticles aggregate comprise an inorganic material comprising at least one metal element having an atomic number Z of at least 25, each of said nanoparticle and of said nanoparticles aggregate being covered with a biocompatible coating; ii) the nanoparticles and/or nanoparticles aggregates concentration is of about or less than 0.5% (w/w); and iii) the apparent viscosity at 2s - of the gel comprising nanoparticles and/or nanoparticles aggregates, is between about 0.1 Pa.s and about 1000 Pa.s when measured between 20°C and 37°C. 1 The composition of the invention typically allows the delineation and visualization of at least 40% of the target biological tissue when said tissue is observed using an X-ray imaging equipment.